

REMARKS

This Amendment is submitted in response to the Office Action dated September 30, 2002 (Office Action). Claims 1-5 were pending in the subject application. Applicants have hereinabove amended claims 3-5. Accordingly, claims 1-5 are pending in the subject application. Support for the amendments to claims 4 and 5 can be found at page 7 of the Specification. Accordingly, no new matter has been entered and Applicants respectfully request entry of this Amendment.

Rejection Under 35 U.S.C. 112, Second Paragraph

In section 2 of the Office Action, claims 3-5 were rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. Applicants have amended claims 3-5 to obviate the concerns of the Examiner. Applicants respectfully maintain that the claims have been amended for grammatical purposes only and that the scope of the claims has not been narrowed in any manner related to patentability. Applicants respectfully request that the Examiner reconsider and withdraw the objections to the claims under 35 USC § 112, second paragraph.

Rejection Under 35 U.S.C. 102 and 103(a)

The present invention is not anticipated by Sasaki et al., (US 6,165,581)

In sections 3 and 4 of the Office Action the Examiner rejected claims 1-5 under 35 USC §102 and §103(a) as being anticipated and/or rendered obvious by U.S. Patent No. 6,165,581 to Sasaki et al. (Sasaki). Applicants respectfully traverse these rejections and request reconsideration in light of the remarks set forth herein.

Sasaki provides "a high density magnetic recording medium capable of preventing migration of lubricant to mechanical parts such as a liner and having long lasting lubricating performance and running performance" (column 3, lines 4-8). In order to achieve this objective, Sasaki teaches a magnetic recording medium comprising a nonmagnetic under layer and a magnetic recording layer, which are coated successively and formed on a nonmagnetic support. According to Sasaki, at least one of the nonmagnetic lower layer and the magnetic recording layer must contain a fatty acid ester compound containing at least one side chain group having a molecular weight of 70 or more. As described below, Sasaki teaches a side chain with 9 carbon atoms and is a different compound from the tetraester compound of the present invention.

In contrast, the objective of the present invention is to provide a high-density magnetic recording medium, comprising a lubricant of specific chemical structure to achieve high durability and high resistance to damage and wear as well as strong electromagnetic transfer characteristics. Furthermore, the invention relates to a magnetic recording medium comprised of a primer layer and at least one magnetic layer coated on the primer layer, said primer layer containing at least one type of tetraester compound selected from the general formula (1). Support can be found inter alia in the Specification, as filed, at page 5, line 27 thru page 6, line 6. Also, the tetraester compound of the present invention includes an alkyl side chain with 2 to 7 carbon atoms.

Applicants respectfully submit that Sasaki fails to disclose the features of the present invention, more specifically, a magnetic recording medium, which has high calendar moldability, high storage property, good durability – particularly, high-speed durability at high temperature,

and high electromagnetic transfer characteristics. Sasaki also fails to teach using tetraester compounds having alkyl side chain containing 2 to 7 carbon atoms.

According to the Examiner, the tetraester compound of the present invention is similar to pentaerythritol tetradecanate in Example 3 of Sasaki and suggests that it would be obvious to select the compound of the present invention from the reference. However, Applicants respectfully assert that pentaerythritol tetradecanate in Example 3 contains a side chain with 9 carbon atoms and is a different compound from the tetraester compound of the present invention.

Applicants respectfully submit that when the number of carbon atoms in the alkyl side chain exceeds 7, the viscosity increases and the fluid-lubricating property is decreased, leading to lower durability. Therefore, pentaerythritol tetradecanate containing 7 or more carbon atoms in the side chain frustrates the objective of the present invention and therefore does not render the tetraester compound of the present invention obvious.

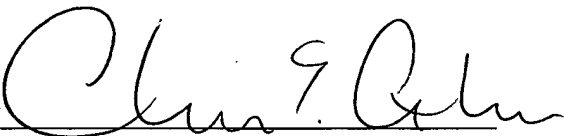
Furthermore, the tetraester compound of the present invention has a high ester group concentration in the lubricant and is easily mixed with the binder. Therefore, even when the molecule becomes bigger, the fluid lubricating property is not decreased due to the increase in viscosity. Thus, the tetraester compound has high smoothness during calendar processing, and can provide high durability, particularly in high-speed durability at high temperature. Although pentaerythritol tetradecanate and tetraester compounds may be homologues with the same molecular weight, that is where the similarities end. The present invention calls for the tetraester compound because of the characteristics described above that is desirable to fulfill the objective of the present invention. Since Sasaki's objective and compounds used are fundamentally different from that of the present invention, a person of ordinary skill in the art therefore would

not have found it obvious to substitute the tetraester compound for pentaerythritol tetradecanate to obtain the desired objective of the present invention.

Accordingly, Applicants respectfully submit that the present invention is not anticipated or rendered obvious by Sasaki and request that the Examiner reconsider and withdraw the rejection of claims 1-5 under 35 U.S.C. §102 and §103(a).

No additional fee, other than the fee for a three-month extension of time, is deemed necessary in connection with the filing of this Amendment. However, if any additional fee is required, such fee may also be charged to Deposit Account No. 19-4709. Early and favorable action in the above-identified application is respectfully requested.

Respectfully submitted,

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